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ABSTRACT

Presented is a guide designed to provide information on 27 perceptual-motor and psychomotor tests and scales for use with handicapped children so that valid and informed decisions can be made in selecting test instruments for prescriptive and diagnostic purposes. The guide is comprised of one section on motor ability, perceptual-motor development, and psychomotor tests and another section on locally developed assessment devices. Included are a brief discussion of the concepts pertaining to perceptual-motor testing and activities; background information to help in selecting tests and in devising instruments based on the best individual components of standardized batteries; brief summaries of various psychomotor and perceptual-motor tests and scales (including information on test availability, what and how the test measures, administrative considerations, and general comments); and representative samples of locally-designed testing instruments with samples of how school districts have devised their own methods of scoring, recording, and tabulating both individual and group results of various measuring devices. It is noted that selective use of summary charts can be helpful in devising items and batteries to evaluate specific strengths and weaknesses of handicapped individuals, and that information provided in the publication can be used to plan hundreds of physical education activities. (Author/SB)

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THE HANDBOOK OF PHYSICAL EDUCATION AND ACTIVITIES FOR EXCEPTIONAL CHILDREN

EC 080 914

1975
Institute for Physical Education
IFM Building
Old Saybrook, CT 06475

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PREFACE

A difference is a difference only when it makes a difference

This guide is designed to provide information about perceptual-motor and psychomotor tests and scales for use with impaired, disabled, and handicapped persons so that valid and informed decisions can be made in selecting test instruments for prescriptive and diagnostic purposes. In this guide you will find:

- A brief discussion of the concepts pertaining to perceptual-motor and psychomotor testing and activities.
- Background information to help in selecting tests and in devising instruments based on the best individual components of standardized batteries.
- Brief summaries of various psychomotor and perceptual-motor tests and scales. Each summary contains information about where the test is available, specific characteristics of the test in terms of what is measured and how it is measured, administrative considerations, and general comments.
- Representative samples of locally-designed testing instruments with samples of how school districts have devised their own methods of scoring, recording, and tabulating both individual and group results of various measuring devices.

The guide is designed to help you select tests and scales that accurately assess levels of perceptual-motor function and overall development of those you teach and help. Selective use of summary charts can be helpful as you devise items and batteries to evaluate specific strengths and weaknesses of individuals entrusted to your care. By carefully studying the summaries of standard testing instruments, the summary chart, and copies of locally-devised instruments, you can come up with a variety of different test batteries to add variety to your testing program and to meet different and ever-changing situations and needs.

You will find the items listed in the various test batteries, in the summary charts, and on the locally devised instruments will provide you with hundreds of activities that you can use to give your program added variety and interest.

Diligent and creative use of this guide will enable you to provide countless individuals with a variety of handicapping conditions with new and exciting learning experiences and substantially improved educational opportunities which will better the quality of their lifes now and in the years ahead.

ACKNOWLEDGEMENTS:

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PART ONE:

MOTOR ABILITY, PERCEPTUAL-MOTOR DEVELOPMENT AND PSYCHOMOTOR TESTS

Our challenge is to reach the unhandicapped mind behind the handicapped senses. To know is more important than to see. To understand is more important than to hear.

Richard Kinney

There is no clear dichotomy between physical fitness and motor function. However, evidence indicates that minimum levels of specific components of physical fitness—strength, speed, agility, balance, power, flexibility, and coordination—are essential if satisfactory performance is to be achieved in various motor skills. Teachers/leaders must clearly understand traits and components of motor ability—the developed capacity of an individual, which can improve with training and instruction—if programs are to consist of meaningful activities to meet the needs of each individual participant.[1]

More attention must be given to developing simple and fundamental movements and basic motor patterns in programs for impaired, disabled, and handicapped persons. The individual as a complete person cannot be overlooked in considering motor development; motor learning is not achieved in isolation as every individual is involved in many situations which influence and affect motor patterns and skills. Dividing a person into convenient physical, mental, emotional, and social compartments is purely an academic expedience; the human organism functions as an integrated whole not as individual parts. Sensory mechanisms, perceptual interpretations, social interaction, emotional overlays, and mental attitude *all* affect motor performance, just as motor function forms the base for perceptual and conceptual function and influences intellectual performance. Professionals from many disciplines recog-

nize interrelationships among sensory, motor, and perceptual development. Some investigators suggest that changes take place in the nervous system as sensory, motor, and perceptual functions become more complex and refined. Ability to perform complex activities requires control from higher centers of the nervous system and more complicated neuromuscular patterns. Many new terms have found their way into the literature because of this emphasis—perceptual-motor training, sensory-motor activities, visual-motor perception, psychomotor function, mobility training, reflex therapy, neurological organization, movigenic curriculum, force methods, Doman-Delacato approach, Kephart technique, Frostig Methods, Ayers System, ad infinitum.

Patterning and controlling the output are terms that mean essentially the same thing as kinesthesis and assistive therapy, which have been used by physical educators and physical therapists for years. However, thrust and emphasis on these techniques give new dimensions to physical education and recreation; they are being recognized for their potential and impact upon individuals with learning problems as well as brain injured, neurologically impaired, and mentally retarded children. Physical education and physical recreation programs can no longer focus solely on motor skills involved in games, relays, and dances. Motor activities must also be selected on the basis of the developmental level and readiness of each individual; one must move from skill to skill, activity to activity, and level to level, in a sequential and progressive manner. Too often, impaired, disabled, and handicapped youngsters are expected to perform motor skills on the basis of their type or level of deficiency. However, past experience, motivation, determination and drive, understanding of activities themselves, pride and self-confidence have great influence upon one's skill in performing motor activities; often these factors are more important than the impairment, disability, or handicap itself. Important factors in the integrated development of motor ability include:

- *Neurological organization* which refers to the sequential pattern of neurological growth from birth to maturity; each level of development serves as a base for further development in the next stage. As a child takes part in a variety of activities, coordinated development of the neuromotor (neuromuscular) system is promoted through integration of kinesthetic, tactile, visual, and auditory stimuli. Motor performance and perceptual development are, in turn, improved. Information, skills, and awareness gained at one level are building blocks for success at the next level. A variety of motor activities can contribute to orderly development of the nervous system, especially at the most fundamental level, where activities like moving arms and legs without forward movement, crawling, creeping, walking, running, jumping, hopping, and skipping contribute much. Some authorities feel that consideration should be given to dominance of each individual's hands, feet, eyes, and ears, in an effort to encourage youngsters to

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[1]The reader is referred to the following sources for in-depth treatment of perceptual-motor development/learning: *Annotated Bibliography on Perceptual-Motor Development*. Washington, D.C.: American Alliance for Health, Physical Education, and Recreation, 1973; Barbara Philbrick. "Selected Readings on Perceptual-Motor Learning: An Annotated Bibliography." *Journal of Health, Physical Education, Recreation*, Vol. 39, No. 2 (February 1968), pp. 34-35; Newell C. Kephart. *The Slow Learner in the Classroom*, Columbus, Ohio: Charles E. Merrill Books, 1971; Bryant J. Cratty, *Movement Behavior and Motor Learning*, Philadelphia: Lea & Febiger, 1967; Robert N. Singer, *Motor Learning and Human Performance: An Application to Physical Education Skills*, New York: Macmillan Co., 1968.

acquire unilateral control—i.e., all controlled by same side of brain. Body scheme, self-image, and ego-consciousness all are stimulated and have, in some cases, improved with better neurological organization.

- *Motor generalizations* [1]which involve (a) balance and postural orientation, as an individual manipulates and controls his body against gravity, (b) locomotion, as an individual controls the body in space in relation to other objects in the environment, (c) contact with an external object, as an individual controls it in relation to himself and the external environment, and (d) receipt and propulsion of an object, as it is received or propelled in relation to an individual in the environment.

Motor generalizations are different from motor skills in that they enable an individual to perform motor activities in different environments and under a variety of conditions. Motor skills are rather rigid and specific. One who develops a motor skill may have difficulty in transferring, applying, or performing it except in the way it was learned. This is consistent with research showing low correlations among motor skills except when muscles and muscle groups are used in exactly the same way, with identical movement through the same angle and range of motion. Motor generalizations serve as a foundation for developing specific motor skills needed for successful participation in games, sports, dances, and recreational activities. Activities focusing on important motor generalizations must be planned for and structured in physical education and recreation programs for many impaired, disabled, and handicapped persons to be sure they receive adequate emphasis. Physical education teachers, recreation leaders, and other persons involved in these programs can, after adequate assessment and evaluation, consider activities designed to develop both motor generalizations and skills. For example:

- *Infant stimulation and reflex training* encourage development of the most primitive and fundamental functions.
- *Mobility training* promotes basic stages of neurological organization; certain coordination activities are important in aiding neurological organization.
- *Balance activities* of all types—static, dynamic, object—enhance motor development.
- *Fundamental movement activities* improve basic motor functions—i.e., walking, running, stair-climbing, jumping, hopping, skipping, climbing, throwing, catching, dodging.
- *Movement exploration or a discovery approach* improve both motor ability and physical fitness.
- *Rhythmical activities and dances* improve motor ability.
- *Gymnastic activities*—i.e., tumbling, apparatus, dual and group stunts, balancing stunts, trampoline participation—improve motor skills.
- *Recreational and sports activities* improve motor skills—i.e., swimming, ice skating, roller skating, bicycling.

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[1]Based on theories of Newell C. Kephart.

- ***Small and large apparatus activities*** promote both motor ability and physical fitness.

In many instances careful observation of individuals in specific activities provides important information about status, achievement, and progress of each participant. This information can be valuable in guiding teachers and leaders to the next appropriate sequential step for a particular participant. In addition to using the following instruments as formal evaluative tools, consider incorporating specific items into ongoing activities to assess individual development.

	Visual Tracking	Visual Discrimination and Copying of Forms	Visual Discrimination and Copying of Rhythmic Patterns	Dynamic Balance	Static Balance	Spatial Body Perception	Agility	Fundamental Movements	Gross Motor Coordination Eye-Foot	Gross Motor Coordination Eye-Hand	Fine Motor Coordination	Tactile Discrimination	Auditory
Perceptual Test Battery			X										X
Physical Ability Rating Scale	X	X		X	X	X		X		X	X		
Motor Developmental Activities for the Mentally Retarded	X			X	X		X	X	X	X			
A Psychoeducational Inventory of Basic Learning	X	X	X	X	X	X	X	X	X	X	X	X	X
Individual Motor Achievement Guided Education			X		X	X		X	X		X		
Kindergarten Auditory Screening Test													X
A Movigenic Curriculum	X	X	X	X		X	X	X	X	X	X	X	X
Movement Pattern Checklist								X					
Move—Grow—Learn	X			X	X	X	X	X	X	X	X		
Teaching Research-Motor Development Scale for Moderately/Severely Retarded Children	X				X	X		X		X	X		
MVP Motor-Free Visual Perception Test	X	X				X							
Perceptual Motor Attributes of Mentally Retarded Children and Youth	X				X	X	X	X		X			
3-D Test for Visualization Skill	X	X								X			

MOTOR ABILITY, PERCEPTUAL-MOTOR DEVELOPMENT AND PSYCHOMOTOR TESTS

	Visual Tracking	Visual Discrimination and Copying of Forms	Visual Discrimination and Copying of Rhythmic Patterns	Dynamic Balance	Static Balance	Spatial Body Perception	Agility	Fundamental Movements	Gross Motor Coordination Eye-Foot	Gross Motor Coordination Eye-hand	Fine Motor Coordination	Tactile Discrimination	Auditory
Perceptual Motor Survey	X			X	X	X		X		X			
Frostig Developmental Test of Visual Perception	X	X				X				X			
Oseretsky Tests of Motor Proficiency	X				X			X	X	X	X		
Purdue Perceptual Motor Survey	X	X	X	X		X		X					
Early Detection Inventory	X	X				X		X	X	X	X		X
Doman-Delacato Developmental Mobility Scale								X					
Basic Motor Fitness	X		X	X	X			X	X	X			
Basic Concept Inventory		X				X							
Evanston Early Identification Scale		X				X							
Developmental Tests of Visual-Motor Integration		X											
Rail Walking Test				X									
Florida State University Diagnostic Battery of Recreative Functioning for Trainable Mentally Retarded	X	X	X	X	X			X	X	X	X		
Hughes Basic Gross Motor Assessment				X	X			X	X	X			
Functional Neurological Evaluation	X	X	X	X				X	X	X	X	X	X

MOTOR ABILITY, PERCEPTUAL-MOTOR DEVELOPMENT, AND PSYCHOMOTOR TEST ITEMS

Listed items and activities can be incorporated into formal or informal approaches for assessing each of these motor, perceptual-motor, and psychomotor functions. Only items and activities that are part of test batteries and rating scales found in this publication are listed.

Auditory Development

Acuity
Association
Audition
Decoding
Differentiation
Discrimination
Memory
Reception
Sequencing
Span

Balance Dynamic

Balance Board Activities
Beam/Rail/Bench Walks
Bounce Board Activities
Locomotor Activities
Stepping Stones
Stunts/Self-Testing Activities
Trampoline Activities

Balance Static

Balance Board Activities
Beam/Rail/Bench Walks
Stork Stand Series
Stunts/Self-Testing Activities

Balance Object

Carry object
Finger/Band Activities
Stick activities

Fine Motor Coordination

Building
Coloring
Copying
Cutting
Doing Puzzles/Mazes
Drawing
Eating
Fitting Forms/Shapes
Grasping
Gripping
Hammering
Lacing
Manipulating
Stacking
Tapping
Tracing
Typing
Winding
Writing

Gross Motor Coordination Eye-Foot

Climbing Stairs
Kicking Activities
Motor Planning/Sequencing
Rope Jumping

Gross Motor Coordination Eye-Hand

Ball Activities
Catching Activities
Manipulative/Manual Activities
Motor Planning/Sequencing
Tapping Activities
Target Activities
Throwing Activities

Gross Motor Coordination General

Calisthentic Activities
Exercise
Motor/Planning/Sequencing
Simultaneous Activities
Trampoline Activities
Tumbling/Apparatus Activities

Gross/Motor Fundamental Movements

Balancing
Batting
Bouncing
Catching
Climbing
Crawling
Creeping
Dancing
Galloping
Hanging
Hitting
Hopping
Imitative Movements
Jumping
Kicking
Landing
Leaping
Lifting

Marching
Placing
Pulling
Pushing
Rolling
Running
Shifting
Sitting
Sliding
Skipping
Standing
Striking
Swinging
Throwing
Tossing
Walking

Miscellaneous

Agility
Conceptual Activities
Emotional Development
Endurance
Language Development
Rhythm
Social Development
Speed
Strength

Spatial-Body Perception

Bilateral Activities
Body Abstraction
Body Awareness
Body Localization
Directionality Activities
Identification of Body Parts
Imitation of Body Movements
Homolateral Activities
Homologus Activities
Laterality Activities
Self-Identification
Sensory-Motor Integration
Shape/Size/Form Differentiation/ Discrimination
Unilateral Activities

Tactile Development

Active Touch
Discrimination of Textures, Size, Shape, Form, Coins, Materials
Passive Touch

Visual

Acuity
Binocular
Closure
Constancy
Copying
Differentiation
Discrimination
Equilibrium
Figure-Ground Relationships
Imagery
Matching
Memory
Monocular
Ocular Control
Ocular Pursuit
Patterning
Sequencing
Shifting
Spatial Relationships
Steering
Tracking
Transformation

A PERCEPTUAL TEST BATTERY: DEVELOPMENT AND STANDARDIZATION
University of Chicago Press with the Department of Education of the
University of Chicago 5801 Ellis Ave., Chicago, Illinois 60637

WHAT IS MEASURED	HOW MEASURED
Auditory discrimination	Differentiation as to whether word pairs read aloud are the same or different
Auditory memory span	Repetition of words beginning with a set of two and progressing through a series of six
Auditory sentence memory	Repetition of sentences varying in length from four to 15 words
Auditory sequencing span	Recall of digits in form of familiar digit span forward test; recall of digits is used to assess sequencing ability rather than simple recall
Visual form discrimination	Differentiation of relatively gross differences in visually presented forms
Visual form memory	Recall of free forms not easily identifiable by name

Administration of Test: Test is designed to explore auditory and visual perceptual processing abilities of children from five through eight.

PHYSICAL ABILITY RATING SCALE
University Hospital School
Iowa City, Iowa 52240

WHAT IS MEASURED

Includes 230 specific test items administered to children of varying ages. Items range from toilet habits, ability to lift glass, grip, dressing one's self, feeding one's self, to a variety of physical and motor skills including building towers, copying, drawing, jumping, hopping, skipping, running, galloping, balancing, walking, climbing, throwing, catching, etc.

HOW MEASURED

Skills are measured by periodic tests given during the youngster's stay at the hospital.

Administration of Test: Test rates child on how many tasks can be performed successfully; comparisons are made of results from test administered when child first enters hospital with repeated administrations every three months. Tasks are divided into those from birth through 72 months and broken down by age level so that expectations and performances can be realistically compared. Items related to activities of daily living are rated by occupational therapy and nursing departments; remaining activities are rated by physical education department. Test can be spread over many sessions and given informally with teachers and other personnel keeping a rating check list form and noting periodically how the youngster is doing. Norms are available and a youngster's performances can be compared with those of other children his own age.

Comments: Test can provide a variety of clues for preparing a shorter test battery for physically handicapped children in differing educational and residential settings.

MOTOR DEVELOPMENTAL ACTIVITIES FOR THE MENTALLY RETARDED
Louis Bowers, Division of Physical Education
College of Education, University of South Florida
Tampa, Florida 33620

WHAT IS MEASURED

Neuromuscular development

HOW MEASURED

Contains complete developmental sequences for balance, movement exploration, trampoline, perceptual-motor activities, catching, throwing, bouncing, and kicking.

Administration of Test: Not really a test but a listing of developmental sequences. Provides a discussion of developmental sequences and approaches and suggests activities to evaluate neurological fitness.

Comments: Also available from the author are:

- A modified Perceptual-Motor Survey which permits the teacher/leader to evaluate a youngster's ability to identify body parts, imitate movements made by the examiner, and demonstrate awareness of body in space.
- A test of locomotor development with heavy emphasis on ability to move the total body while shifting weight from one foot to another, to jump and land with control, and to move the limbs across the midline.

A PSYCHOEDUCATIONAL INVENTORY OF BASIC LEARNING
Fearon Publishers
6 Davis Drive, Belmont, California 94002

WHAT IS MEASURED	HOW MEASURED
Gross-motor development	Rolling, sitting, crawling, walking, running, throwing, jumping, skipping, dancing, self-identification, body localization, body abstraction, muscular strength, general physical health
Sensory-motor integration	Balance and rhythm, body-spatial organization, reaction-speed-dexterity, tactile discrimination, directionality, laterality, orientation
Perceptual-motor skills	Auditory acuity, auditory decoding, auditory-vocal association, auditory memory, auditory sequencing, visual acuity, visual coordination and pursuit, visual form discrimination, visual figure-ground differentiation, visual memory, visual-motor memory, visual-motor fine muscle coordination, visual-motor and spatial-form manipulations, visual-motor speed of learning, visual-motor integration
Language development	Vocabulary, fluency and encoding, articulation, word attack skills, reading comprehension, writing, spelling
Conceptual skills	Number concepts, arithmetic processes, arithmetic reasoning, general information, classification, comprehension
Social skills	Social acceptance, anticipatory response, value judgments, social maturity

Administration of Test: In the six major classifications of the Inventory, 5 major items are evaluated as shown in the column at the right. There are three task levels for each item. Levels are: B—generally accomplished by primary level youngsters; M—generally accomplished by middle elementary age groups; A—advanced tasks that are generally accomplished by older elementary pupils. Inventory can be admin-

istered by special education teachers, remedial specialists, educational therapists and consultants, psychologists, and others concerned with learning problems of children. Major use is with exceptional children for whom highly specific instructions must be devised. Inventory should always be administered on an individual basis and take as long as necessary to provide valid information and make the subject comfortable. Inventory is not a standardized instrument and relies entirely on examiner's subjective judgment and experience with respect to rating to be employed and the nature of the remedial program required. The examiner's kit, in addition to the accompanying workbook, includes a teaspoon, beads, texture ball, old newspapers, softball, jump rope, records and record player, hand mirror, brick, playing cards, books, paper bag, nail, stick, and pencils, sticks (of two, four, and six inch lengths), letters (wood, cardboard, or plastic), square wood blocks, scissors, cardboard, paper towel roll, yardstick, wristwatch, thumbtacks, pictures, six coins, half inch bolts, washers, and nuts. A pupil's response to each educational task is evaluated and noted by placing an X in the appropriate column—VW—very weak performance; W—weak performance; A—average performance; S—strong performance; VS—very strong performance. An overall rating for each learning ability should be made and checked on the appropriate form. Overall ratings of weak or very weak in any category indicate a disability and youngsters should be programmed accordingly.

Comments: Inventory was developed as an aid in the initial evaluation of elementary and junior high pupils with suspected learning disabilities. Inventory can be used for pupil placement in, or recommendation for, some type of special education class or educational therapy. The basic assumption is that the teacher of children with learning disabilities must begin with an evaluation of major educational tasks as a prerequisite to any meaningful curriculum development or remedial plan. Inventory should prove most helpful when used by the teacher in conjunction with a psychoeducational consultant such as a school psychologist who follows up with more specialized examinations.

INDIVIDUAL MOTOR ACHIEVEMENT GUIDED EDUCATION
The Devereu Foundation Press
Devon, Pennsylvania 19333

WHAT IS MEASURED	HOW MEASURED
Sequential motor activity	Pronation-supronation heel-toe tapping, finger wiggle
Fine motor ability	Opposition patting, foot patting, finger tapping
Static balance	Modified station, one-leg stand
Perceptual-motor ac[illegible]	Alternate finger to nose, alternate heel-to-knee, heel-to-toe, heel-toe walking

Administration of Test: Test, known as IMAGE, is primarily for emotionally handicapped and/or neurologically impaired children between the ages of four and ten. It can be administered individually to a child by a teacher in 20 minutes. A youngster

showing a marked deficit in any of the four primary areas can be placed in an appropriate primary program designed to remediate a particular deficit. If a child's scores are consistent in all four areas, his total score may indicate placement in one of three general programs--basic, remedial, or skill development. Part of the program beyond the test involves use of the IMAGE kit which weighs 44 pounds and utilizes standardized equipment to remediate deficiencies in performing sequential movement tasks, spatial orientation, fine motor control, and perceptual-motor activity through the use of 373 suggested activities.

Comments: IMAGE program offers a method of measuring a child's present level of motor functioning and remediating his major motor deficits through an individualized exercise program. Fundamental premise of IMAGE centers on the direct relationship between a child's level of motor performance and his social, emotional, and academic abilities. Program utilizes a specially designed IMAGE kit, an instructional manual, a booklet of DTEC (Deveroux Test of Extremity Coordination) score sheets, and a set of IMAGE profiles from which the teacher can implement individual activities programs for each child. The IMAGE manual offers an easy step-by-step approach to the program and defines each activity. It also includes appropriate exercise activities divided into sequential developmental phases according to levels of difficulty and examples of weekly programs.

KINDERGARTEN AUDITORY SCREENING TEST
Follett Educational Corporation
1018 West Washington Boulevard, Chicago, Illinois 60607

WHAT IS MEASURED	HOW MEASURED
Auditory perceptual skills	Discrimination of same and different word pairs, analysis and synthesis of words, figure-ground distinction

Administration of Test: Test can be administered by classroom teacher or specialist to students in groups of six to ten in about 20 minutes. Children listen for speech against a noisy background, synthesize phonemes into words—sound blending—and tell whether words are the same or different—auditory discrimination. Scoring of each of three subtests takes one to two minutes. Students mark answers in picture response books.

Comments: Test identifies children with auditory perceptual problems that may lead to learning disability, particularly in reading. Children who fail one or more of the subtests should be referred to specialists for further evaluation. Teacher's Guide provides instruction on administration of test, scoring, and background information about the process of auditory perception and its importance to early education. Test results provide clues or offer guidelines for developmental training in auditory perception.

A MOVIGENIC CURRICULUM
Bureau for Handicapped Children
State Department of Public Instruction
Madison, Wisconsin 53706

WHAT IS MEASURED

Muscular strength (pulling, lifting, pushing)

Dynamic balance (recovery, maintain alignment, sustain transport patterns)

Spatial awareness (rotation in space, labeling directions in space, basic lateral patterning, visualization of space, reorganization of space, reproduction of design in space, rolling in space, variable transport in space)

Body awareness (body image, function of body parts)

Visual dynamics (visual steering, visual tracking, sustained attention, visual shifting, visual memory)

Auditory dynamics (expressive audition, receptive audition, listening games)

Kinesthesia (gross movement patterning, fine movement patterning)

Tactual dynamics (active touch, passive touch)

Bilaterality

Rhythm

Flexibility

Motor planning

HOW MEASURED

Many items are provided to help teachers and other personnel evaluate specific characteristics noted and to plan activities, curricula, and approaches to help boys and girls with specific deficiencies

Administration of Test: Not really a formal test but rather a detailed curriculum for children with learning problems; approaches are included that can be used for identification and remediation.

Comments: Guide provides analysis of curriculum planning and activities for children with special learning problems. It explains concept of movigenics and offers information on rationale, research findings, planning, practical activities and approaches, and placement factors. Guide contains sample planning forms for specific movigenic learning in specified areas.

MOVEMENT PATTERN CHECKLIST
Margaret M. Thompson, Department of Physical Education
University of Illinois
Urbana, Illinois 61801

WHAT IS MEASURED	HOW MEASURED
Walking, running, jumping, hopping, skipping, sliding, crawling, climbing, rolling, standing, throwing, catching, hitting, kicking, pushing, pulling	Youngsters are evaluated on ability to perform movements as directed on specific checklist patterns for each movement.

Administration of Test: Checklists are used to evaluate basic movement patterns and provide status assessment of patterns fundamental to human performances which form foundation for human movement behavior. Checklist can be used by either trained or untrained persons in varying situations according to need. Classroom teachers, special education teachers, physical education teachers, counselors, clinicians, and parents can administer test in one or two physical education periods. As many evaluations as possible should be performed during the same session, but administrators of tests should try not to combine evaluations concurrently from the same activity; try to complete evaluation of one pattern before moving to another. Evaluations should be made on specific checklists provided for each activity. Applicable comments should be made on the child's checklist for each movement. Checklists are adaptable for use either on file cards (4 by 6 size) or on paper for inclusion in a record folder. In addition, there is a Movement Pattern Profile Sheet for use in summarizing information from checklists for each child. There is also a Movement Pattern Checklist—Short Form for use in evaluating general elements and deviations on all patterns on a single sheet. This can serve as a screening device and provide a picture of fundamental pattern characteristics.

Comments: Requires a minimum of equipment, space, or special instructions for the child. Test provides educators with much useful data on movement patterns of individual children.

MOVE-GROW-LEARN: MOVEMENT SKILLS SURVEY
Follett Educational Corporation
1018 West Washington Boulevard, Chicago, Illinois 60607

WHAT IS MEASURED	HOW MEASURED
Coordination and rhythm	
Gross motor	Tumbling, running, skipping, hopping, rope jumping, throwing
Fine motor	Drawing, coloring, writing, cutting
Eye motor	Bead stringing, beanbag catching, ball catching and kicking, ball bouncing games, tetherball

Agility	Dodgeball, shuttle runs, sitting to standing exercises
Flexibility	Toe touching exercises, back bends
Strength	Trunk and shoulder girdle: sit-ups, leg lifts, and push-ups; limbs (hands, arms, legs): pull-ups, jungle gym activities, broad jump, rope climbing
Speed	Running (games and races)
Balance	
Static	Standing on tiptoe, standing on one foot with eyes opened and/or closed
Dynamic	Walking (different directions and movements) on a balance beam
Object	Carrying beanbag on head
Endurance	Distance running, basketball, soccer (similar games)
Body awareness	Relaxing, discriminating right and left

Administration of Test: Survey is not a standardized psychometric instrument in which developmental norms are provided for each age level. Assessment is based on examiner's observations of the child in classroom, playground and gymnasium activities. Ratings are from 1 through 5: 1—severely impaired; 2—mildly impaired; 3—adequate; 4—good; 5—excellent. Ratings of 1 and 2 indicate that considerable training is needed in the particular skill; a rating of 3 shows that some additional training is needed in the particular skill. Children who receive ratings of 4 and 5 in particular skills can benefit from challenging movement education experiences centering around the specific skills.

Comments: This survey was developed to assist classroom teachers, movement education supervisors, school psychologists, and other professional school personnel in evaluating selected aspects of a child's motor development. The survey is intended for use with the Frostig-Maslow *Move-Grow-Learn* program and with *Movement Education: Theory and Practice*. Move-Grow-Learn Movement Skills Survey Form should be prepared for each child. The form sheet contains references to the Move-Grow-Learn Training Activities in each of the eight movement areas. Children under eight should not be rated on endurance.

THE TEACHING RESEARCH MOTOR-DEVELOPMENT SCALE FOR MODERATELY AND SEVERELY RETARDED CHILDREN
Charles C. Thomas Publisher
Springfield, Illinois 62717
1972

WHAT IS MEASURED

Motor coordination—17 types of motor test activities are used with built-in interest and motivational features; test items reflect specific motor and fitness aspects tested

HOW MEASURED

Tests of varying degrees of difficulty in each category are used to evaluate a child's ability to:

Stand and crouch on tiptoes

Stand heel to toe, stand on one foot

Jump on toes rapidly; jump a bar at gradually increasing heights

Perform a sequence of walking tasks of gradually increasing difficulty

Imitate movements

Touch nose and fingertips, close and open hands alternately, tap rhythmically with feet and fingers

Step over a knee-high obstacle, duck under a shoulder-high obstacle, pass between obstacle and wall

Place matchsticks and coins in a box

Wind thread and wind thread while walking

Tap paper with pencil so as to make dots, draw lines, trace large and small mazes

Cut paper with scissors, cut a straight line, cut a circle

Catch tossed ball with two hands, bounce ball and catch with one hand, bounce ball with one hand five times, catch tossed ball with one hand

Throw a ball six feet, throw a ball six feet inside a six-foot arc, throw tennis ball at target

Hang from a pull-up bar, pull-up to eye level, pull-up

Lift head and shoulders off floor, do sit-ups

Push-up head and shoulders, do knee push-ups, do regular push-ups

Run 50 feet, run 100 yards, run 220 yards

Administration of Test: Test may be administered at one sitting or conducted during several testing periods by a teacher or other professional. Needed materials include wooden boxes, wooden spools, thread, matchsticks, balls, wooden targets, poles, mazes, pencils, scissors, sponge mats, pull-up bars, chalk, tape, or paint. An overall motor development score is provided by adding points earned in each of 17 test categories. Range of scores, sequence of tasks in each category, and divergence of ability and skill permits adaptation for children of preschool age through high school. No norms are used. Each child is treated as an individual.

Comments: This motor development scale can form the basis of a comprehensive physical education program for impaired, disabled, or handicapped persons.

MVPT MOTOR-FREE VISUAL PERCEPTION TEST
Academic Therapy Publications
1539 Fourth Street, San Rafael, California 94901

WHAT IS MEASURED	HOW MEASURED
Spatial relationships Visual discrimination Figure ground Visual closure Visual memory	These five major aspects of visual perception are stressed in the 36-item multiple choice test in which children are asked to answer questions regarding which one of four drawings is correct in terms of requested relationship to a master drawing

Administration of Test: MVPT is a 36-item individually administered multiple choice test that can be given by a teacher or other professional educator to children between the ages of five and seven in less than 10 minutes. The only required response is that the subject point to the one of four alternatives that he thinks is correct. The examiner records subject's response by marking the appropriate space on the accompanying scoring sheet. Generally accepted administrative procedures for standardized testing should be followed. A youngster's perceptual age is determined by his raw score or number of correct answers.

Comments: MVPT is a test of visual perception that can be used by teachers, psychologists, educational specialists, and others who need a quick, highly reliable, and valid measure of overall visual perceptual processing ability. The MVPT avoids motor involvement and is practical for screening, diagnostic, and research purposes.

Notes:

THE PERCEPTUAL-MOTOR ATTRIBUTES OF MENTALLY RETARDED CHILDREN AND YOUTH

The Los Angeles County Department of Parks and Recreation, and the Special Education Branch, Los Angeles City Schools
450 N. Grand Avenue, Los Angeles, California 90012

WHAT IS MEASURED	HOW MEASURED
Body perception	Level I—youngster imitates tester in lying on back, stomach, and sides with legs in position demonstrated and explained by examiner; Level II—youngster demonstrates knowledge of left and right and of body parts such as arms, elbows, knees, and hands by raising specific body parts and by touching body parts to other body parts
Gross agility	Level I—youngster rises up from position on mat and faces tester; Level II—youngster kneels down on one leg at a time and then stands up on one leg at a time
Balance	Level I—youngster balances on left foot using arms to assist him; youngster balances on one foot with arms folded across chest; Level II—youngster demonstrates ability to perform a series of balancing activities standing on one foot with arms in various positions and eyes opened or closed
Locomotor agility	Level I—youngster demonstrates ability in cross-pattern crawling and walking, jumping forward and backward on two feet, and hopping; Level II—youngster demonstrates ability to jump straight ahead, in empty squares on a mat, backwards down mat and land in six squares; hop down mat and land in six squares, hop in empty or unmarked squares
Ball throwing	Level I—youngster imitates examiner in throwing a playground ball using a one-hand overhand throw; Level II—youngster tries to hit target painted on mat using playground ball
Ball tracking	Level I—youngster tries to catch playground ball bounced to him by examiner; Level II—youngster tries to touch a softball hung on a string and swung by tester

Administration of Test: Test is divided into two levels in each category and should be administered individually by a teacher or qualified tester in a room approximately 30 by 30 feet, with a ceiling about nine-feet high. Test should take about 30 minutes, depending on whether part or all of the second level is administered. Tester should describe each test item and demonstrate as often as necessary to create understanding exactly the way movement is to be executed. Tester should follow explicit directions provided for each item and positively reinforce and encourage children who may ask how they are doing. Instructions as to order of administering tests and scoring are provided as is guidance on when to administer Level II. To establish rapport between tester and child, the youngster should be introduced to the tester who should say that "we will be playing some games for a few minutes." The word *test* should not be used. Required equipment includes playground balls, rubber softball, standards for holding the swinging softball, foam-plastic canvas covered mat 4 feet by 6 feet which should be marked with 12-one-foot squares and a two-foot by two-foot target should be on the reverse side of the mat (black oil cloth square is recommended), clip board and scoring sheet, and stop watch or watch with a second hand is needed. Decile rankings by age are provided for: trainables (5-24 years of age); educables (5-20 years of age); educationally handicapped (5-16 years of age); Down's Syndrome (5-22 years of age). Norms are provided for each test for youngsters of each category in each age group.

Comments: Manual includes complete rationale and explanation of test.

THE 3-D TEST FOR VISUALIZATION SKILL
Academic Therapy Publications
1539 Fourth Street, San Rafael, California 94901

WHAT IS MEASURED	HOW MEASURED
Level I	
Test I—shape identification	Identification of a sphere placed in hands held behind back; subject then draws any color that will help him remember what he felt; repeat process using a pyramid, and then a cube
Test II—size perception	Large and small forms are put on table; children are asked about them, including picking similar forms, describing differences, and drawing the forms
Test III—visual equilibrium	Look at all pictures child has drawn and ask series of questions relating to whether drawings are in middle of paper, how they are standing (straight up, circular, etc.)
Level II	
Test I—visual memory	Use either three or six forms and build something with child; then ask child to draw what was seen or built

Test II—operational imagery	Ask youngster whether what he has made or drawn (what he did in visual memory test) reminds him of anything he has seen or done; ask him what it reminds him of and if he can add anything to make it look more like the object, etc.
Level III	
Test I—transformation	Put six geometric shapes on table and have child place them in two separate lines with a space down the middle that looks like a street; have youngsters select one shape to be a friend and place him at end of street; ask series of imaginary questions about clothes, size, shape, etc. as friend starts walking closer to child; idea is to describe whether friend is bigger, colors are brighter, etc., as he is closer to child

Administration of Test: Test may be given individually or in groups to children between ages of three and eight. Administered individually, the test for children between three and five can be given by a teacher in 20 minutes. An individually administered test for six to eight year olds takes about 25 minutes since they are more apt to complete the test and younger children would probably not do so. Giving test to a group of 10 to 15 children takes about 35 minutes, but this will vary depending on age and number of skilled aides available. For over 30 children, 40 minutes are needed. Required materials are: set of six three-dimensional geometric forms for each child; four 9" x 15" sheets of white drawing paper and a box of colored chalk for each youngster; small table with a chair for child and tester or aide; pencil and check sheet; box with lid to hold testing materials out of sight until they are used. Complete directions for scoring and administering test are provided but no specific norms have been established.

Comments: Test booklet contains detailed instructions and illustrations for administering test including sample scoring sheets, sample dialogue, and much detail to help the teacher evaluate results and elicit responses and actions from the child. The three levels and subtests in each level place the visualization skills in sequence. Children should not be tested beyond their ability. A whole section is devoted to activities to help overcome specific deficiencies.

Notes:

PERCEPTUAL-MOTOR SURVEY

Matthew E. Sullivan, Physical Education Consultant
Special School District of St. Louis County
12100 Clayton Road, Town and Country, Missouri 63125

WHAT IS MEASURED	HOW MEASURED
Balance (static and dynamic)	Crouching on tiptoes; standing on one foot then the other; walking forward, backward, sideward (step-close, cross step) on balance beam; turning on balance beam; picking up objects; balancing on seat, abdomen
Awareness of self	Location of body parts; busy bee activities; basic movement skills (crawling forward and backward, arm movements, arm and leg coordination); locomotion skills (walking, running, sliding, leaping, hopping, galloping, and skipping); mimetics; stunts on the mat (log roll, cradle, rocking horse, bridge, forward roll, backward roll) and apparatus (climb stairs, climb ladder, front arm support, front turn, skin the cat, bird nest)
Spatial orientation	Location of self still and moving; stepping stones; ball skills (bouncing, kicking, throwing and catching, beachball self-volley); rope skills (jump the shot, long rope jumping, short rope jumping)

Administration of Test: Teacher can score or evaluate during group activity. Test activities can be used to measure changes and improvement of participants in specific activities any time during the year but the whole test battery should be given twice a year. Test can be given to a group or individual and be administered at the convenience of the teacher as part of a class routine. Specific and simple directions for administering the test and for scoring are provided. Required equipment includes a stop watch, balance beam, erasers, fiber barrel, pictures of animals or objects, mats, ordinary stairs, rung ladder, horizontal bar, large area (circle, half a basketball or volleyball court), foot prints, several playground balls, several beachballs, string, safety pins, rubber bands, crayons, and ropes.

Comments: Survey is a complete screening test which classroom teachers can easily administer. Best results occur when survey is administered by two teachers with classes working together with one teacher serving as leader while the other scores the test for each child. While it is recommended that the test be given twice a year—in the early fall and late spring—teachers can constantly work on areas of weakness and continuously evaluate progress made by the whole group and/or individual children.

FROSTIC DEVELOPMENTAL TEST OF VISUAL PERCEPTION
Consulting Psychologist Press, Inc.
577 College Avenue, Palo Alto, California 94306

WHAT IS MEASURED	HOW MEASURED
Eye-motor coordination Figure-ground Constancy of shape Perception of position in space Perception of spatial relations	A paper and pencil test using figures and requiring youngsters to exhibit understanding and perceptual competency in these areas

Administration of Test: Test, which should be administered by a psychologist, testing specialist, reading specialist, or trained teacher, can be given to a group in about 50 minutes and to an individual in 30 to 45 minutes. Norms are available from preschool through grade 3 (4 years through 7 years 11 months). Overall results may be recorded in perceptual quotients which readily reveal a child's deviation from the expected perceptual development for his age.

Comments: Identifies children with visual perceptual problems that may cause learning problems and serves as basis for diagnostic and remedial planning. Remediation with Frostig Remediation Program or Frostig Pictures and Patterns is recommended. An accompanying Teacher's Guide (*The Frostig Program for the Development of Visual Perception* by Marianne Frostig and David Horne, available from Follett Educational Corporation, 1010 West Washington Boulevard, Chicago, Illinois, 60607) provides rationale and exercises and lesson plans for each area covered by the test.

OSERETSKY TESTS OF MOTOR PROFICIENCY
American Guidance Service, Inc.
Publishers' Building, Circle Pines, Minnesota 55014

WHAT IS MEASURED	HOW MEASURED
Static coordination	Static balance tests requiring youngsters to remain standing, to stand on tip toes, to stand on one leg, to maintain crouched position on tip toes, to remain standing with weight on one leg, to stand motionless with weight on one foot
Dynamic manual coordination of hands	Subjects touch point of nose with index fingers, roll up square of silk, throw a ball at target, trace through two mazes with pencil, touch all finger tips of same hand to thumb simultaneously, cut out a circle, catch a ball, balance a rod on index finger, touch thumbs to index fingers of opposite hands

General dynamic coordination	Subjects jump up and down without losing balance, hop, walk a line with eyes open, push a matchbook using preferred foot, jump over rope and land without losing balance, jump as high as possible while clapping hands, jump onto a chair seat without losing balance, jump and strike heels with hands at same time
Motor speed	Youngsters put coins in a box, roll a thread on spool, draw perpendicular lines, distribute playing cards into piles, run and pick up match sticks and place them in piles as well as performing other tasks using match sticks, leaf through a book page by page for 15 seconds, make piles of match sticks, punch a pin through design of perforations, make dots with a pencil point, run and interchange small items on table followed by drawing three crosses. Time limits are provided for tasks assigned to each age group.
Simultaneous movement	Subjects describe circles in air using index finger of each hand, put matchsticks in box, walk around room holding spool of thread in one hand which is rolled onto index finger of other hand, tap floor with feet in alternating pattern using any rhythm, tap feet in alternate pattern in any rhythm while tapping top of table with index fingers of same hand, perform tapping tasks combining foot and finger movements, make dot with two pencils—one in each hand—on two different sheets of paper, place coins in one box and match sticks in another box simultaneously, draw vertical lines on one sheet of paper and crosses on another simultaneously
Synkinesia	Youngsters clasp examiner's hands in specified sequences, clench teeth and show them by parting lips, strike a table top forcefully several times with mallet, knit eyebrows without making other movements, wrinkle the forehead without making other movements, raise legs and alternately extend and flex each foot starting from reclining position in chair, close and open the right eye and after five seconds the left eye, close and open hands alternately, close right and left eyes alternately for ten seconds, open and close hands alternately while simultaneously bending open hand toward closed one

Administration of Test: Test, which takes 45 minutes, is administered individually by an examiner and resembles Binet Intelligence Test in construction. It is scored on a pass-fail basis with different components of each major test category provided for each age level from four through 16. Test distinguishes four grades of motor proficiency. Specific directions are given for each test item at each age level. A complete set of test equipment, including manual and 25 individual record blanks, is available for $32.00.

Comments: Pantomime demonstrations of instructions reduce the intellectual factor with respect to performance on test. Six basic types of tests are provided for each group. Several revisions have been made in test by American Investigators: R. L. Berk, *A Comparison of Performance of Subnormal, Normal, and Gifted Children on the Oseretsky Tests of Motor Proficiency* (Doctoral Dissertation, Boston University School of Education, 1957); R. H. Cassel, "The Vineland Adaptation of the Oseretsky Tests," *Training School Bulletin* (1949, 46: 3 and 4. Monograph supplement, series number 1); William Sloan, "The Lincoln-Oseretsky Motor Development Scale," *Genetic Psychology Monograph* (1955, 51:183-252); Keith M. Kershner, Russell A. Dusewicz, and John R. Kershner, "The KDK Adaptation of the Vineland Oseretsky Motor Development Tests: A Group Testing Technique" in John R. Kershner's, *An Investigation of the Doman-Delacato Theory of Neuropsychology as it Applies to Trainable Mentally Retarded Children in Public Schools* (Harrisburg, Pennsylvania, Department of Public Instruction, May 1967, pp. 63-103). There appears to be some question as to just what motor traits these test items do measure.

EARLY DETECTION INVENTORY (EDI)
Follett Educational Corporation
1018 West Washington Boulevard, Chicago, Illinois 60607

WHAT IS MEASURED	HOW MEASURED
Social-emotional behavior responses	Assesses child's self-control, independence, pleasantness, feeling of comfort, responsiveness, attention span, ability to follow directions, cooperativeness, confidence, enthusiasm
School readiness tasks	Determines whether child knows name, address, phone number, birth date, colors; can count to 13; knows right from left; can tie shoestring or bow; recognizes penny, nickel, dime, quarter, can make picture of a person; can reproduce circle, cross, square, triangle, rectangle, diamond, divided rectangle
Motor performance	Includes gross motor coordination, fine motor coordination, hand preference and eye perference; gross motor abilities tested include walking a straight line, jumping, hopping, skipping, galloping; fine motor factors considered are posture, position or grip on pencil and crayon, reproduction of geometric forms

Physical information	Eye, dental, hearing, and speech examination; histories are compiled
Family and social history	Questionnaire on pertinent socio-economic factors included
Medical history	Questionnaire relating prenatal care, birth, child's history, and family history

Administration of Test: The inventory is simple and does not require intensive training to administer. Children are evaluated individually. School readiness tasks can be administered by a teacher in about 20 minutes. Physical examination and history taken by other professionals requires about 45 minutes. Parent accompanies child. In addition to EDI, following materials are needed: eight crayons (red, yellow, blue, green, orange, purple, black, brown); thirteen pennies; one nickel, dime, and quarter; child's lace-up shoe; two pencils; pictures to be colored; and six-inch cardboard square with one-inch hole in center. A three-point scale is used to rate the three major areas—social-emotional behavior responses, school readiness tasks, and motor performance.

Comments: Test identifies children with potential problems, i.e., social, emotional, or physical. Results offer guidelines for curriculum planning. The Early Detection Inventory helps school personnel evaluate a child's strengths and weaknesses in skills essential to successful school experiences. It is a basic screening inventory designed for use with children entering kindergarten, first grade, nursery school, Head Start, transitional, or ungraded primary classes. Among identifiable areas that may relate to learning difficulties are (1) lack of gross motor coordination; (2) lack of fine motor coordination; (3) poor adjustment to basic life experiences; (4) marked language disorder symptoms; and (5) excessive anxiety or fear. The manual for the early detection inventory is well-written, explicit, and clear. It contains much information on organizing clinics and programs to overcome deficiencies.

Notes:

THE PURDUE PERCEPTUAL-MOTOR SURVEY
Charles E. Merrill Publishing Company
1300 Alum Creek Drive, Columbus, Ohio 43216
1966

WHAT IS MEASURED	HOW MEASURED
Balance and posture	Walking forward, backward, sideways on walking board; performing a series of eight tasks evaluating ability to jump, hop, and skip while maintaining balance
Body image and differentiation	Identification of body parts, imitation of movement, obstacle course activities, Kraus-Weber Test, angels-in-the-snow
Perceptual-motor match	Making circle, double circle, lateral line, and vertical line on chalkboard; performing eight rhythmic writing tasks

Ocular control	Ocular pursuits of both eyes, right eye, left eye, and convergence are tested
Form perception	Seven geometric forms—circle, cross, square, triangle, horizontal diamond, vertical diamond, and divided rectangle—are drawn on sheet of paper

Administration of Test: *The Purdue Perceptual-Motor Survey* is not a test. It is a survey which allows teachers, psychologists, therapists, etc. to observe a broad spectrum of behavior within a structured, but not stereotyped, set of circumstances. The book contains procedures for administering and scoring the survey which includes a variety of specific perceptual-motor test items. Rationale and development, standardization statistics, and practical use and application of the survey are also included. Clear and precise instructions for scoring and administering each test item are included, with illustrations to clarify exactly what the youngster is expected to do. Forms for recording performance for each youngster are provided.

Comments: The main purpose of the manual is to provide the teacher with a tool which can be used to identify children who do not possess perceptual-motor abilities necessary for acquiring academic skills. Much of this same information can be found in N. C. Kephart, *The Slow Learner in the Classroom* (Columbus, Ohio: Charles E. Merrill Books, Inc., 1971). *Winter Haven's Perceptual Testing and Training Handbook for First Grade Teachers*, Genevieve I. Curry, Winter Haven Lions Research Foundation, Inc., P. O. Box 111, Winter Haven, Florida, 33880, also utilizes much of the materials used in the *Purdue Perceptual-Motor Survey*.

THE DOMAN-DELACATO DEVELOPMENTAL MOBILITY SCALE
The Rehabilitation Center at Philadelphia
8801 Stenton Avenue, Philadelphia, Pennsylvania 19063

WHAT IS MEASURED	HOW MEASURED
Movement without mobility	Rolling over, rolling in a circle or backward
Crawling	Crawling without pattern, homologously, homolaterally, cross pattern
Creeping	Creeping without pattern, homologously, homolaterally, cross pattern
Walking	Cruising (pulling self erect and walking holding furniture), walking without help and without pattern, walking cross pattern

Administration of Test: Test is a reproduction of stages and levels of mobility development through which normal children progress from birth to achievement of perfect

walking. Scale is designed to provide a comparative mobility measure for brain-injured children. Manual contains information on how infants move arms and legs in stages of development through walking. Four stages—movement without mobility, crawling, creeping, and walking—are outlined with 13 levels. For each level there is a description of age range and brain level for normal infants. Each activity is illustrated and clearly explained with instructions for parents and others working with the child.

Comments: Scale was developed as a result of several years of research, observation, and experimentation relating to how infants move consecutively through stages and levels of development. Each stage and level is defined and represented pictorally. A developmental chart on which progress for brain injured and other youngsters in need of help can be plotted is contained in the manual.

BASIC MOTOR FITNESS
Donald A. Hilsendager, Department of Physical Education
Temple University, Philadelphia, Pennsylvania 19122

WHAT IS MEASURED	HOW MEASURED
Walking	Coordinated opposites (left arm-right foot)
Balance	Walk across balance beam 12 feet long and four inches wide
Crawling	Coordinated opposites (left arm-right leg, etc.) across mat a distance of four feet keeping abdominal area in contact with mat
Creeping	Creep across mat on hands and knees using principle of coordinated opposites
Balance	Stand stable for 15 seconds with eye closed
Lateral balance	Stand on one foot for five seconds and then the other—eyes open
Coordination	Jump off bench 18 inches high and land on left foot, then right foot, then both feet simultaneously
Climbing steps	Climb any available steps using alternate foot sequence
Hopping	Hop on each foot three times and both feet three times
Skipping	Skip smoothly for six feet without holding on to anyone else or taking an extra step or hop

Marching	March in place for 15 seconds while maintaining an unbroken cadence
Ball handling	Using a soft cloth ball, youngster will catch a ball thrown from six feet, throw a ball six feet with right hand and six feet with left hand, kick ball rolled to him, pick up ball from ground
Ball bounce and catch	Bounce an eight-inch playground ball on ground and catch it

These first 13 items are considered qualitative. If a youngster fails to pass three of them on a pass-fail basis, he does not participate in the 13 quantitative activities.

Flexibility	Using a special flexibility tester (The Wells-Dixon Sit and Reach Test may be substituted)
Explosive leg power	Standing broad jump
Balance	Two balance beams are tapered down and youngsters walk heel-toe fashion down the beams as far as they can before falling off
Abdominal strength and endurance	Sit-ups
Upper arm and shoulder strength and endurance	Medicine ball put, using five pound medicine ball
Hand grip strength	Right and left grip strength is measured using the Jamar Manuometer
Pushing	The Manuometer push and pull attachment is used
Pulling	The Manuometer push and pull attachment is used
Speed	35-yard dash
Agility	Agility run
Cardiorespiratory endurance	300-yard run-walk
Overall endurance	Endurance index combining scores on 35-yard dash, agility run, and 300-yard run-walk

Administration of Test: Test contains 13 qualitative—i.e. pass-fail—and 13 quantitative items—i.e. measured items. Qualitative measures are concerned with fundamental motor skills and quantitative items measure more specific motor skills.Equipment needs are noted under "How Measured." Test is individually administered. Permission to use is required.

THE BASIC CONCEPT INVENTORY
Follett Educational Corporation
1018 West Washington Boulevard, Chicago, Illinois 60607

WHAT IS MEASURED	HOW MEASURED
Identification of concepts often used in verbal directions; find various types of persons, animals, objects; identify what they can do; identify colors and size; identify specific actions; identify and differentiate between such things as not more than, between, next to, tallest, biggest, body parts, sex, and names	Use of pictures on a multiple choice, yes/no, or pass/fail basis
Repetition of statements regarding specific facts and concepts and the ability to answer questions regarding statements	Repeat statements and ability to answer questions regarding them
Ability to perform specific acts, repeat numbers in sequence, and identify objects	Youngsters clap, slap table, and clap in various sequences; repeat numbers in groups of two, three, and four; identify flowers, milk, table

Administration of Test: Test can be used effectively for youngsters at preschool level through third grade (up to age 10). Test should be administered individually by teacher if results are to be used for remediation and by a clinician if results are to be used for diagnosis. Test takes 30 to 60 minutes to administer.

Comments: Test is a broad checklist of basic concepts that are involved in new learning situations in the primary classroom. It indicates whether a child is familiar with basic concepts, has knowledge of plurals and pronouns that are frequently used in explanations and instructions. Test also shows whether a child is familiar with conventional statements and can understand them and whether he can perceive the familiarity of elements sequenced in a pattern. Test is particularly useful with experientially deprived preschool and kindergarten children, slow learners, emotionally disturbed, and mentally retarded youngsters.

EVANSTON EARLY IDENTIFICATION SCALE
Follett Educational Corporation
1018 West Washington Boulevard, Chicago, Illinois 60607

WHAT IS MEASURED	HOW MEASURED
Body awareness	Ability to draw a picture of a person
Emotional-social development	Ability to draw a picture of a person

Administration of Test: Test can be administered individually or to a group by a teacher in 15 to 20 minutes. A ten-item weighted scale is used for scoring. Test is recommended for use with children between ages of five through six years and three months to help identify children who can be expected to have learning disabilities.

Comments: Test serves as a simple check on body awareness and indicates whether additional classroom work is necessary to teach and/or reinforce knowledge of body parts. Children with marginal scores are identified and should be watched closely for onset of specific difficulties. Test should help identify children with failing scores who should be referred to the school psychologist for diagnosis and special treatment. Potential difficulties that may be identified include perceptual, emotional, or developmental problems that might otherwise be attributed to low intelligence or poor conduct.

DEVELOPMENTAL TEST OF VISUAL-MOTOR INTEGRATION (VMI)
Follett Educational Corporation
1018 West Washington Boulevard, Chicago, Illinois 60607

WHAT IS MEASURED

Ability to imitate drawings of various forms—visual-motor integration

HOW MEASURED

Copying vertical lines, horizontal lines, circles, vertical horizontal cross, right oblique line, square, left oblique line, oblique cross, triangle, open square and circle, three-line cross, directional arrows, two dimensional rings, six-circle triangle, circle and tilted square, vertical diamond, tilted triangles, eight-dot circle, Wertheimer's Hexagons, horizontal diamond, three dimensional rings, necker cube, tapered box, three dimensional star

Administration of Test: Test may be group or individually administered in 15 to 20 minutes. Thorough teacher orientation is required. Experience is important in valid scoring of results. Norms for children between the ages of two and 15 are provided.

Comments: Test identifies child with visual-motor integration deficiencies and serves as a basis for further assessment of specific area of difficulty. It also suggests use of the following sources in follow-up procedures: (1) further assessment of the difficulty with the VMI Assessment Sheets, (2) remediation using the Frostig Remediation Program and Frostig Pictures and Patterns, (3) Resources listed in accompanying Administration and Scoring Manual, (4) assessment and teaching strategies designed to help youngsters improve motor proficiency, tactual-kinesthetic sense, tracing, visual perception, and visual-motor integration, and (5) provides actual plans for accomplishing these objectives in the accompanying Administration and Scoring Manual. There is an excellent accompanying monograph which provides a superb explanation of origin, construction, and correlations of the test with useful conclusions for test usage. Administration and Scoring Manual contains brief and direct recommendations for remediation. VMI correlates with mental age, chronological age; correlations with MA and CA are higher in first-grade children than with other children. VMI is primarily interested in child's information processing system.

THE RAIL-WALKING TEST FOR BOYS AND GIRLS
Motor Skills Research Exchange, 1:4:34-36;1949

WHAT IS MEASURED	HOW MEASURED
Locomotor ability—balance	Walk across three wooden rails that are six and nine feet long with varying widths from four inches down to one inch

Administration of Test: Scoring is inversely weighted on basis of widths of respective rails. Certain minimum scores must be attained before subject is allowed to attempt to walk a narrower rail. Maturational norms are available for boys and girls.

THE FLORIDA STATE UNIVERSITY DIAGNOSTIC BATTERY OF RECREATIVE FUNCTIONING FOR THE TRAINABLE MENTALLY RETARDED
Jean Mundy, Department of Recreation
Florida State University, Tallahassee, Florida 32306

WHAT IS MEASURED	HOW MEASURED
Object identification	Ability to identify box, pencil, bead, ball, stick, circle, table, chair, block
Action concepts	Ability and understanding related to pointing, giving, taking, pulling, pushing, picking-up, putting down, looking at, putting in, going, stopping, walking slowly, walking fast, turning right and left, turning all the way around
Position and quantity concepts	Demonstrate ability and understanding related to amount, position, direction, place, and space as reflected by knowledge of top, bottom, front, back, in, out, on, between, over, under, up, down, right, left, drop, pick-up, center, inside, outside, circle, opposite, hand, foot, one, three, four, five, two; subjects are to perform specific acts demonstrating understanding of these terms
Color	Ability to show blue, red, green, white, black, brown, orange, yellow cards as directed
Rhythm	Clap to slow and fast 3/4 and 4/4 beat; march to fast and slow 4/4 beat
Manipulative skills	Trace, color, and cut out shapes; thread beads; and follow these four directions: stand-up, pick-up ball, walk around chair, sit down

Motor skills	Ability to catch ball thrown to certain prescribed area (below waist, right quadrant, left quadrant, directly in front and slightly over head, slightly below waist, slightly past arm, reach to right and to left); throw ball to examiner, kick ball rolled by examiner when ball is slightly to right and slightly to left

The second half of *The Florida State University Diagnostic Battery of Recreative Functioning for the Trainable Mentally Retarded* is the *Kephart Perceptual Rating Scale Survey* which is almost identical to *The Purdue Perceptual-Motor Survey* which is previously discussed and thus not repeated here.

Administration of Test: Test can be administered by a recreation specialist or teacher on an individual or group basis. Entire test need not be given at one sitting. Major emphasis is on subjective analysis rather than on objective evaluation. Importance of visual evaluation based on experience and professional judgment is stressed. Clear directions are offered for each test item and a simple record sheet for each major category is provided with space to check whether each task is performed correctly or incorrectly. Scoring instructions are provided. No norms are given. Equipment needed for each test is noted and none of the equipment is expensive or hard to obtain.

Comments: This profile identifies skills, abilities, and competencies needed by an individual to participate in recreational activities. A brief view of a child's profile permits a teacher or recreation leader to guide the child into activities consistent with his level of ability with opportunities to achieve immediate success. Testers should consider the impact of motivation, social pressures, previous experiences, understanding of test items and what is expected, self-confidence, competitiveness, cooperativeness, pride, and self-concept on the child's motor proficiency and physical fitness scores. It should be noted that no program should become enslaved to testing and evaluation.

HUGHES BASIC GROSS MOTOR ASSESSMENT (BGMA)
Jeanne Hughes, Adaptive Physical Education Consultant
Office of Special Education, Denver Public Schools
Denver, Colorado 80203

WHAT IS MEASURED	HOW MEASURED
Static balance	Stand on left foot for ten seconds; then on right foot for ten seconds
Gross motor coordination	Stride jumps—ten with feet about 12 inches apart
Dynamic balance	Tandem walking in which youngster walks forward and backward on lines on floor; hopping on each foot for ten hops while staying between taped lines

Fundamental movement—locomotor skill	Skipping between taped lines on floor
Eye-hand coordination	Tossing a beanbag underhand at an 18-inch square target taped to the wall six times; distance thrown varies with age; yo-yo in which subject swings ball like a pendulum, gives it a short toss and catches it in a bottle; youngsters get six tries; throwing, catching, and dribbling a ball

Administration of Test: Test was developed for physical educators, special educators, physical therapists, and other health services personnel to use in evaluating children six to twelve who appear to have gross motor deficiencies. Test should be administered on an individual basis, where possible, but as many as five can be tested at one time. Testing time is approximately 15 minutes. Test should be administered in a room which is large enough for free, safe movement; testing area should be marked with masking tape or floor-marking tape following carefully prescribed directions. Required equipment includes masking or floor-marking tape, a stop watch (optional), six commercial colored beanbags with slick covering, one six-inch and one seven-inch rubber playground ball, two one-gallon bleach bottles, heavy string, one whiffle ball, and one tennis-size rubber ball. Carefully prescribed directions for administering and scoring test are included as is a worksheet for recording scores and information.

Comments: Test is designed as an instrument to evaluate gross motor competencies basic to development of higher level motor skills and can provide information about a child which may indicate he should be referred for medical attention. Test should be used in conjunction with observations of child's motor performances in spontaneous play, in physical education class, and in the classroom. It is not appropriate for use with children having serious, diagnosed physical disability but is useful in detecting strengths and weaknesses of children having minimal motor dysfunction. Test may be used as an aid in planning activity programs but it will not prove that a child does not have a perceptual-motor problem or a learning disability. Tasks are modified slightly for different age groups.

FUNCTIONAL NEUROLOGICAL EVALUATION
Dallas Academy
Oak Lawn Avenue, Dallas, Texas 75219

WHAT IS MEASURED	HOW MEASURED
Sensory development	By a series of tests in these categories: *Vision*—basic light reflex, binocularity, visual tracking, convergence, visual perception, reading, laterality preference, and visual survey; *Audition*—Startle reflex, auditory perception, laterality preference, and abstract concepts; *Tactility*—vital sensation, gnostic sensation, laterality preference, and tactile perception

Motor development	By a series of tests in these categories: *Mobility*—crawling, creeping, brachiation, laterality preference, walking, hopping, skipping, rolling, somersaults, balancing, jumping rope; *Language*—tonality, articulation, organization; *Hand use*—cortical opposition, bimanual function, laterality preference, handwriting, and pencil grasp

Administration of Test: Evaluation is on individual basis with different functions evaluated during separate testing periods. A comment is made after each function is evaluated; comments refer to performance as compared with normal function for subject's age. Summary of each subject's evaluation is prepared and individual programs prescribed for subjects based on test results. Evaluation is repeated periodically to determine what improvement has been made and individual programs revised accordingly.

Comments: *Functional Neurological Evaluation* is similar to *Doman-Delecato Developmental Profile* originally developed at the Institutes for the Achievement of Human Potential, Philadelphia.

Notes:

PART TWO: LOCALLY DEVELOPED ASSESSMENT DEVICES

It is more important for us to know where we are going than to try to get there too quickly. Time is on our side. We must not mistake activity for achievement.

Personnel in many public and private schools, school districts, recreation departments, activity and day care centers, clinics, and residential facilities have devised and successfully used their own testing instruments, rating scales, and assessment devices. Often items from various standardized tests have been adapted or modified and used with locally devised items as bases for evaluating, diagnosing, and prescribing appropriate physical, motor, and recreational activities. This approach allows physical educators, recreation personnel, special education teachers, and other concerned individuals to be flexible in preparing, modifying, and using a variety of assessment devices, evaluative instruments, and rating scales regardless of specific situations, changing environments, and needs of individuals.

The traditional approach in evaluation and assessment has been to test an individual in a special situation or environment and then generalize results to a variety of other situations, related or not! However, many experienced persons have been extremely successful in obtaining this same kind of information from carefully planned observations in actual program situations. Rather than determining general abilities or specific skills in badminton, basketball, basic movement patterns, physical fitness traits, or perceptual-motor functions from results on formal tests, individuals are observed in actual badminton or basketball games or lead-up activities, on the playground, in the gymnasium, or in the swimming pools. In fact, locally developed progress charts and performance scales have been extremely effective in individual swimming programs at all levels. Neither process—formal testing nor informal assessment—can be haphazard or left to chance; both must be planned, systematic, and regular.

Evaluation and assessment are inseparable from progressive developmental sequences themselves and are vital and integral parts of the learning process itself. In this way, when an individual is successful in performing certain tasks, movements, skills, or patterns, the next appropriate step in the progression can be introduced. This is consistent with current emphasis on criterion, references, techniques, and also recognizes the specific nature of learning as applied to each individual's ability to participate successfully in the gymnasium and classroom, on the playground and athletic field, in camp or in the swimming pool. Evaluation and assessment are intended as aids to instruction and to help teachers, leaders, and others know and zero-in on individual participant needs. As a continuous and ongoing process, emphasis is on observation of growth, development, and progress in real life program situations. *Educated hunches* gleaned from observations when combined with knowledge of children in general, each participant in particular, and tempered with personal experience and good judgment are basic ingredients for individualizing programs and activities for each child. In this way programs and activities can be modified or changed daily as actual performance and progress are observed and assessments made. This process also eliminates the testing situation itself as a factor which can have either a positive or negative influence on results and performances by specific individuals in given situations. In short, evaluation and assessment are a part of educational decision-making in terms of what each individual can do and learn during the course of a single period, an entire day, a whole week, one semester, or the school year. Objectives for each youngster must be made, revised, and reexamined as performances are continuously observed and progress assessed.

Regardless of approach—formal testing or informal assessment—major purposes are the same:

- Aid and facilitate instruction as to what comes next.
- Determine effectiveness of certain activities, approaches, and methods for each individual participant.
- Provide a record of growth, development, performance, improvement, and progress.
- Determine each child's strengths, abilities, weaknesses, and problem areas—what a child can and cannot do.
- Assess the degree in which specific programs, certain activities, and various approaches accomplish what written goals and objectives stipulate; this is when one is held accountable.

Important to any assessment system is a procedure for scoring, tabulating, and recording data and information about specific aspects of individual performance. Since increasing numbers of personnel in local programs have indicated that many formal tests and diagnostic instruments have limited value and applicability for participants in their programs, devices and approaches have been developed to meet needs and abilities of those in local programs, specific localities, and given situations. Specific items have been extracted from a variety of test batteries and different approaches used to score and record this information. Representative examples from instruments, scales, and devices developed and used in local school systems, special schools, recreation departments, residential facilities, day care and activity centers, clinics, early childhood centers, and related programs are included in the following

pages. This material is provided to show a variety of locally developed devices and approaches used for both formal testing and informal assessment purposes. For example:

- Present status in qualitative terms:
  - slow, average, good, needs more training
  - pass, fail; yes, no; can, can't
  - adequate, educational care, referral care
  - cannot do, inadequate, adequate
  - unable, weak, average, strong
  - correct, hesitates
  - satisfactory, unsatisfactory
- Present status in quantitative terms:
  - time for agility run, dash, endurance run, holding balance, hopping a given distance
  - distance walked on balance beam, jumped, run in a given time
  - number of pull-ups or sit-ups, times ball is bounced, objects picked up in a given time
  - rating according to predetermined scale based on specific criteria or standards
- Use line drawings, stick figures, or diagrams as a means by which non or poor readers can use the same materials and score cards as students who read. It is vital that levels of physical fitness and ability to perform motor tasks be accurately determined and not reflect general intelligence or specific academic skills.
- Group and present personal characteristics and basic behavior traits in different ways and various patterns:
  - neurological organization, mobility, perceptual characteristics, agility, basic motor skills, fitness activities
  - functional concepts, physical education, play skills
  - body awareness, spatial relationships axial movement, locomotor, gross agility, balance-posture, ball handling
  - hand-eye choice, jumping, hopping, angels in snow, balance beam/rail walking, skipping, swinging, identification
  - gross motor, sensory-motor integration, perceptual-motor skills, language development, conceptual skills, social skills
  - language, pre-reading and reading, math, perceptual-motor
  - obstacle course, warm-ups, rhythms, hokey pokey, ball handling, kick ball, gunny sack relay
  - attitudes and habits, relaxation, general movement patterns, specific movement patterns, eye movement patterns, communication patterns, visualization patterns
  - agility, balance, body image, coordination, directionality, figure ground, laterality, reflex, shapes, tactile, vision
- Group different numbers of specific tasks within each basic category or area depending upon characteristics and traits themselves and type of information needed about each participant.

- Include information about attitudes and approaches of participants toward certain tasks and activities in addition to comments and information about actual performance of skills, movements, and patterns:
  - wouldn't try
  - tried, failed, quit
  - tried, failed several times, quit
  - tried, continued to try and fail, had to be stopped

In preparing scales, instruments, and related devices, regardless of purposes for which they are to be used, *simplicity* and *flexibility* are important considerations. Devices need to be structured so that they can be used easily by individuals with diverse amounts of training, background, and experience; they must not require a lot of time to record information and results of observations. In addition, devices must be *functional* so information can be applied and used as bases for improving program opportunities and experiences for each program participant. Flexibility is important so devices can be used in ways or approaches best for a particular staff in a given program to meet unique needs of the population being served.

In preparing assessment devices and related procedures, teachers/leaders should:

- Be sure items obtain information intended—no more, no less
- Recognize that activities or skills need to be assessed from simple to complex, easy to difficult. However, remember that a progression or sequence appropriate for one individual or most participants in a group is not necessarily effective with everyone—not everyone learns skills, particular patterns, specific movements, given tasks, or perceptual-motor activities in the same order or way; adjustment to individual needs is essential.
- Be able to screen and assess performances of children throughout their educational careers. An increasing number of schools have devised nursery, preschool, or kindergarten developmental profiles and perceptual-motor screening instruments which are administered to children before they start to school. Such screening procedures are helpful for grouping, planning, and making educated guesses with respect to strategies to help each youngster be successful and get off on the right foot in school.
- Be able to determine which boys and girls need supplementary assistance beyond and in addition to regular class programs and which youngsters may require specialized and more formal testing.
- Consider activities and programs designed to meet specific needs of children in various aspects of physical education, recreation, and related activities.
- Demonstrate that formal testing and informal assessment are vital components of the teaching-learning process. No program should become a slave to testing—tests should not be administered solely for the sake of testing and data gathering.

SAN JUAN UNIFIED SCHOOL DISTRICT[1]
Special Education Department

Motor Skill Assessment

BODY AWARENESS

	Test 1		*Test 2*	
	P	F	P	F
Can you point to parts of your head?	0	0	0	0
Can you identify body surfaces? Top? Front? Back? Side?	0	0	0	0
Can you identify and move body parts?	0	0	0	0
Finger to thumb? Both hands?	0	0	0	0
Bend your wrist? Rotate your wrist?	0	0	0	0
Bend your elbow?	0	0	0	0
Bend at the waist?	0	0	0	0
Bend your left knee?	0	0	0	0
Can you open and close hands alternately?	0	0	0	0

SPATIAL RELATIONSHIPS

Can you point to or move body parts on a specific side?	0	0	0	0
Can you distinguish between right and left side of others?	0	0	0	0
Can you move in (a specified direction)?	0	0	0	0
Left-Right	0	0	0	0
Up-Down	0	0	0	0
Before-Behind	0	0	0	0
Over-Under	0	0	0	0
In-Out	0	0	0	0
Far-Near	0	0		0
High-Low	0	0	0	0
Forward-Backward	0	0	0	0

AXIAL MOVEMENT

Can you swing your arm?	0	0	0	0
Both arms?	0	0	0	0
One leg?	0	0	0	0
Can you jump and turn: Quarter turn?	0	0	0	0
Half turn?	0	0	0	0
Full turn?	0	0	0	0

LOCOMOTOR

Can you hop through a hopscotch diagram?	0	0	0	0
Can you hop, step, jump?	0	0	0	0
Can you jump backwards? (Three jumps)	0	0	0	0
Can you tell me the distance you can broad jump?	0	0	0	0

[1]*M. Jeanne Bartelt, Program Specialist, Physical Education, San Juan Unified School District, San Juan, California.*

GROSS AGILITY

	Test 1		*Test 2*	
	P	F	P	F
How fast can you get up and face me?	0	0	0	0

SCORE: GOOD if child sits up and rises in 2 seconds or less.
FAIR if child sits up and rises in 3 seconds or more.
POOR if child turns on stomach and arises.

Can you kneel on one knee at a time and stand up on one leg at a time?	0	0	0	0

SCORE: GOOD if movement is executed perfectly with hands at sides.
FAIR—unsteadiness, without use of hands or uses one or both hands, or falls back.
POOR—uses hands on floor and thighs to assist, touches hands to thighs, or uses *both* knees at once or gets up to both feet at once.

BALANCE POSTURE

Balance Beam—Eyes should be forward on end of beam. Walking sideways, eyes should be focused straight ahead. Use bean bag on the head.

Forward—toe-heel to length of beam	0	0	0	0
Backward—toe-heel to length of beam	0	0	0	0
Sideward—step left, slide right foot to side return to starting position by step right, slide left	0	0	0	0
Stunts—Catwalk, (all fours) forward	0	0	0	0
Walk to center, lower to one knee and stand, walk off	0	0	0	0
Stand with one foot placed directly in front of the other foot	0	0	0	0
Sit in chair, bean bag on head, rise, walk around chair and sit down	0	0	0	0

BALL HANDLING

Throw ball to wall and catch on first bounce 3 out of 5 times, 10-15 feet away	0	0	0	0
Roll ball between two blocks 2 feet apart from distance of 10 feet	0	0	0	0
Throw bean bag to successive 18 inch targets placed at 2 foot intervals	0	0	0	0

LAMPHERE PUBLIC SCHOOLS—
Differential Education
Madison Heights, Michigan 48071

Perceptual-Motor Activities

Name: _____ School: _____ Grade Equiv. ___
Last First Mid. Init.

Birth Date: _____ Sex:___ Teacher: _____ Date: _____

ALL TASKS DONE WITH VISUAL FIXATION

Adequate		Educational Care		Referral Care	Score
5	4	3	2	1	0

1. Hand and Eye

choice			
Right handed	RR LR BR	RL LL BL	Undefined
Left handed	LL RL BL	LR RR BR	Undefined
Undefined Hand dominance			

2. Jump—both feet

Forward	___ Eyes on target ___ Maintains direction ___ Maintains balance	___ Eyes not on target ___ Loses direction ___ Lack Parallelism ___ Rigid	___ Loses Balance ___ Alternate feet ___ Cannot do
Backward	___ Eyes on target ___ Maintains direction ___ Maintains balance	___ Eyes not on target ___ Loses direction ___ Looks back ___ Rigid	___ Loses balance ___ Alternate feet ___ Cannot do

3. Hop

Right foot

- ___ Eyes on target
- ___ 4 hops or more
- ___ Maintains balance
- ___ Maintains direction
- ___ Eyes not on target
- ___ Processes
- ___ Loses direction
- ___ Lands flat footed
- ___ Opposite foot touches floor
- ___ Loses balance
- ___ Cannot do

Left foot

- ___ Eyes on target
- ___ 4 hops or more
- ___ Maintains balance
- ___ Maintains direction
- ___ Eyes not on target
- ___ Processes
- ___ Loses direction
- ___ Lands flat footed
- ___ Opposite foot touches floor
- ___ Loses balance
- ___ Cannot do

4. Angels in Snow

Ipsi.

- ___ Moves limbs smoothly and decisively
- ___ Can move on visual & auditory stimulus
- ___ Processes at first
- ___ MOF on first try
- ___ Segmented movements
- ___ Requires tactual stimulus
- ___ Continuous MOF
- ___ Continuous processing
- ___ Requires kinesthetic stimulus

Contra

- ___ Moves limbs smoothly and decisively
- ___ Can move on visual & auditory stimulus
- ___ Processes at first
- ___ MOF on first try
- ___ Segmented movements
- ___ Requires tactual stimulus
- ___ Continuous MOF
- ___ Continuous processing
- ___ Requires kinesthetic stimulus

5. Walking rail

(off floor)

a. Forward

- ___ Eyes on target
- ___ Uses both sides to balance
- ___ No hesitation
- ___ Eyes not on target
- ___ One-sided activity
- ___ Too fast
- ___ Feet toe in or out
- ___ Can recover balance
- ___ Steps off rail
- ___ Awkward
- ___ Poor balance
- ___ Heel cannot touch toe

b. Backward	____ Eyes on target ____ Uses both sides to balance ____ No hesitation	____ Eyes not on target ____ One-sided activity ____ Too fast ____ Feet toe in or out ____ Can recover balance ____ Steps off rail	____ Awkward ____ Poor balance ____ Heel cannot touch toe
c. Sideways	____ Eyes on target ____ No hesitation ____ Easy - balance ____ Smooth weight shift	____ Eyes not on target ____ Rigid posture ____ Steps off rail ____ Difficulty in weight shift	____ Awkward ____ Poor balance ____ Cannot shift weight
6. Skipping	____ Eyes on target ____ Bilateral skip	____ Eyes not on target ____ Hop and skip alternately ____ Processes ____ Rigid	____ Gallop ____ Cannot skip

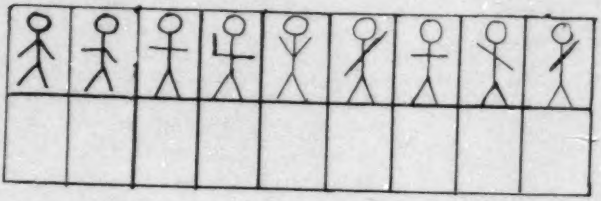
MEDFORD PRESCHOOL[1]
Perceptual-Motor

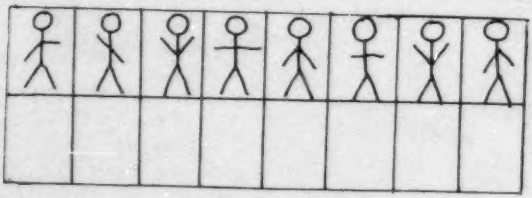
I. **Imitation of Body Movements:**

Given a visual model, the child will imitate the body movements without hesitation.

(Baseline)
+ = Pass

_____
(Date)





J. **Balance Beam Forward:**

Given a verbal command, the child will walk forward, heel to toe, on a balance beam.

(Baseline)
+ = Pass

_____
(Date)

1 step	1 ft.	2 ft.	3 ft.	4 ft.	5 ft.	6 ft.

K. **Balance Beam Backward:**

Given a verbal command, the child will walk backward, heel to toe, on a balance beam.

(Baseline)
+ = Pass

_____
(Date)

1 step	1 ft.	2 ft.	3 ft.	4 ft.	5 ft.	6 ft.

[1]Based on Preschool Curriculum: Preschool Disability, Identification and Prevention. Medford School District 549C, Medford, Oregon.

O. **Bean-bag Throwing:**

Given a verbal command, the child will hit a one foot by one foot target on the wall three out of five times at a designated distance.

(Baseline)
+ = Pass

2 ft.	3 ft.	4 ft.	5 ft.	6 ft.

_____
(Date)

P. **Bean-bag Catching:**

Given a verbal command, the child will catch a bean-bag three out of five times in the hands (not in the arms) at a designated distance.

(Baseline)
+ = Pass

3 ft.	4 ft.	5 ft.	6 ft.	7 ft.	8 ft.

_____
(Date)

Q. **Ball Catching:**

Given a verbal command, the child will catch a 6" diameter ball three out of five times in the hands (not in the arms) at a designated distance.

(Baseline)
+ = Pass

3 ft.	4 ft.	5 ft.	6 ft.	7 ft.	8 ft.

_____
(Date)

GROSS MOTOR[1]

SKILL:	Unable	Week	Average	Strong	REMARKS:
Rolling (left & right)					
1. Roll-hands at side					
2. Roll-hands above head					
3. One hand at side-one above					
4. Somersaults-forward					
Sitting					
1. Sit straight on chair					
2. Indian style					
3. Sit balancing book on head					
4. Sit on balance beam feet up					
Crawling					
1. Creep on stomach					
Forward—					
Backward—					
2. Homolateral crawl					
Forward—					
Backward—					
3. Cross diagonal crawl					
Forward—					
Backward—					
Self-Identification					
1. Responds to name					
2. Watch self in mirror					
3. Identify name					
4. Photographic identification (color)					
5. Picks picture from group					
6. Picks self from within group photo					
7. Writes name					
8. Draws figure					

[1]Based on materials from Audrey Doty, 13 Spring Hill Road, Mantua, New Jersey 08051.

SKILLS:	Unable	Weak	Average	Strong	REMARKS:
Body Localization					
1. Points to or names major parts of body (eye, mouth, etc.)					
2. Points to or names minor parts of body (fingernails, etc.)					
3. Points to parts of body on others					
4. Can play "Simon Says" and "Hokey Pokey"					
5. Trace body of others, put in features					
6. Points out parts of body in photo of self					
Muscular Strength					
1. Crouch and jump					
2. Hang from pole or rings					
3. Climb stairs					
4. Bends knees					
5. Throw medicine ball					
6. Touch floor with fingers					
7. Swim					
8. Sit-ups					
9. Push-ups					
10. Chin-up					
Balance and Rhythm					
1. Run or walk tip toe					
2. One foot stand					
3. Bounce ball					
4. Rhythm band—steady beat					
5. Balance beam					
Forward					
Backward					
Sideway					
Right					
Left					
6. Dancing—contemporary, twist					

MOTOR DEVELOPMENT CHECKLIST[1]
EMR—TMR

	Name:						
Obstacle Course							
1. Roll							
2. Creep							
3. Crawl (hand & knees)							
4. Walk							
5. Walk beam (forward)							
Backward							
Right							
Left							
6. Walk over, under, between							
7. Footsteps w/ crossover							
8. Static balance w/							
eyes closed							
both feet							
one foot							
9. Run							
10. Hop							
11. Climb							
12. Skip							
Warm-ups							
13. Angels-in-the-snow							
14. Wig-wag							
15. Single leg lifts							
16. Hook lie sit-up							
17. Toe touch							
18. Rocker							
Rhythms							
19. Jump rope w/ music							
20. Clap & walk w/ music							

[1]Janet Seaman, California State at Long Beach, Long Beach Recreation Department, Long Beach, California.

Hokey Pokey							
21. R-L discrimination							
22. Identification of body parts							
Ball Handling							
23. Roll							
24. Catch							
25. Overhand throw							
26. Bounce & catch							
27. Roll into box							
28. Bounce on target							
Kick Ball							
29. Kick stationary ball							
30. Kick rolled ball							
Gunny Sack Relay							
31. Jumping							

Scoring: 1 = Cannot do; 2 = Inadequate 3 = Adequate

300 YARD WALK-RUN ENDURANCE							
BENT KNEE SIT-UPS ABDOMINALS							
OSERETSKY-MATCHSTICK (MANUAL) FINE MOTOR COORDINATION							
STANDING BROAD JUMP OR VERTICAL JUMP							
30 YARD DASH-DYNAMIC LEG POWER							
ENDURANCE HANG (UPPER) ARM AND SHOULDER GIRDLE STRENGTH							
AGILITY RUN—AGILITY							
WALL BOUNCE—EYE-HAND COORDINATION							
BALANCE WALK-BALANCE							
NAME							

[1]Boulder Valley School District, Boulder, Colorado

MOTOR-SKILLS TEST[1]
LEVEL ONE

Pupil's Name _____ Grade _____ Age _____

School _____ Teacher _____ Date _____

Test Items	Pretest S. U.	(Check One) Post Test S. U.	Test Differences I. S. D.
I. *Balance Beam*—(Eye-foot coordination, balance). For balance beam activities, have pupils remove shoes. Balance beam or 2 X 4 should be at least 8 feet long.			
A. *Forward*. Walk forward, touching heel to toe, length of beam without stepping off.	_____	_____	_____
B. *Backward*. Walk backward, touching toe to heel, length of beam without stepping off.	_____	_____	_____
C. *Sideward*. Stand sideways on beam. Step with right foot, slide left foot to right. Continue same action the length of the beam without stepping off.	_____	_____	_____
II. *Hopping*—(Balance, coordination)			
A. *Right foot*. 3 hops	_____	_____	_____
B. *Left foot*. 3 hops	_____	_____	_____
C. *Both feet*. 3 hops	_____	_____	_____
III. *Stiff Leg Sit-Up*—(Flexibility, strength)			
A. Lie flat on floor with arms at sides, palms down. ***Keeping legs straight***, lift upper part of body, touch toes with fingertips. (Repeat 3 times.)	_____	_____	_____
IV. *Ball Handling*—(Hand-eye coordination)			
A. *Bounce and catch*. Using both hands, bounce and catch ball 5 consecutive times without missing, dropping, or losing control of 8½" rubber playground ball.			
B. *Rolling ball*. Roll 8½" rubber playground ball at target 10 feet away. Hit target 1 out of 3 tries—use wastebasket, cardboard box, etc. for target.			

* S = performed the skill successfully.
U = unsuccessful performance—indicates deficiency which needs instructional practice.
I = improved performance.
S = post-test score same as pretest score.
D = digressed—post-test score lower than pretest score. Retest in a few days.

[1]Based on Motor Skills Testing in the Primary Grades, Oklahoma Department of Education (Physical Education Section), Oklahoma City, Oklahoma.

MOTOR-PERCEPTUAL MOVEMENT PATTERNS[1]

Name of Child _____ Age ____ Grade ____

Observation and testing of this child indicates the following:	Progress			Needs more training
	slow	average	good	
ATTITUDES AND HABITS				
Effort				
Confidence in movement				
Care and appreciation of equipment				
Ability to work independently				
RELAXATION				
Sleep pattern				
Ability to stop all movement				
GENERAL MOVEMENT PATTERNS				
Flip-flop (tonic neck reflex)				
Head lift and roll				
Rolling				
Crawling				
Creeping				
Walking and running				
Hopping and jumping				
Skipping				
Galloping				
Angels-in-the-snow				
Balancing				
Body image				
Spatial orientation				

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SPECIFIC MOVEMENT PATTERNS	Progress			Needs more training
	slow	average	good	
Manipulation of small articles				
Ball skills				
Rope jumping				
Holding pencil correctly				
Dominance (mixed, right, left)				
EYE MOVEMENT PATTERNS				
Focusing (eye contact)				
Ocular pursuit (following target)				
Peripheral (seeing out of the corner)				
Accommodation (near and far)				
COMMUNICATION PATTERNS				
Ability to follow directions				
Ability to tell or give directions				
VISUALIZATION PATTERNS				
Ability to project and interpret				
Ability to be creative				

School _____

Teacher _____

OTHER COMMENTS:

ADAPTED PRE-BEGINNER SWIMMING PROGRAM

LEVEL I

PUPIL IS ABLE TO:

____ 1. Enter pool via ladder with assistance.
____ 2. Leave pool via ladder with assistance.
____ 3. Sit on deck and enter pool with assistance.
____ 4. Climb on deck from pool with assistance.
____ 5. Bob up and down in water to chin level with support of two arms of instructor.
____ 6. Bob up and down in water to chin level with support of one arm of instructor.

ADAPTED PRE-BEGINNER SWIMMING PROGRAM

LEVEL II

PUPIL IS ABLE TO:

____ 1. Climb down ladder unassisted.
____ 2. Climb up ladder unassisted.
____ 3. Enter pool from deck unassisted.
____ 4. Leave pool from water unassisted.
____ 5. Bob up and down in water without support of instructor, using bobbing progression in Level I.
____ 6. Bob down deep and touch ankles, jump up high in air, and maintain balance using both arms to balance body.

ADAPTED BEGINNER SWIMMING

LEVEL VI

PUPIL IS ABLE TO:

____ 1. Do crawl stroke and rhythmic breathing while standing in place.
____ 2. Do crawl stroke—20 yards. (Arms, breathing, and legs)
____ 3. Do combined stroke on back (kicking and sculling or finning)—10 yards.
____ 4. Change directions to right by reaching with hand and arm and turning head in direction of turn, while kicking legs to maintain horizontal position.
____ 5. Change directions to the left.
____ 6. Turn over from front to back and back to front.

ADAPTED INTERMEDIATE SWIMMING

LEVEL IX

PUPIL IS ABLE TO:

____ 1. Scissors kick 10 yards with kickboard.
____ 2. Crawl kick 10 yards with kickboard.
____ 3. Breaststroke kick 10 yards with kickboard.
____ 4. Sidestroke arms only 5 yards; legs trail.
____ 5. Crawl armstroke only 5 yards; legs trail.
____ 6. Breaststroke armstroke only 5 yards; legs trail.

Source Unidentified

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AN EVALUATION FORM TO DETERMINE LEVELS OF PSYCHOMOTOR FUNCTION IN THE MENTALLY RETARDED[1]

Neurological Organization: "War Games"

A

CRAWLING
1. Homolateral
2. Cross Patterns
3. One leg drag
4. Two leg drag

CREEPING
5. Homolateral
6. Direction
7. Knee slap

STANDING
8. Homolateral
9. Cross Patterns
10. Bilateral

Perceptual Character Directionality—Pioneers-Eagles

B

1. Jump rope
2. Make a mountain
3. Walk-run-skip Left and right
4. Jump the m'tn.
5. Indian dance
6. Straddle m'tn.
7. Ride a horse & walk the rope
8. Hunt the deer
9. Shoot the deer
10. Bring it home to campfire

Basic Motor Skills Gym Organization

C

1. Line-up (height)
2. Dress-right (spc)
3. Count-off (No.)
4. Open-ranks
5. Measurement
6. Forward-roll
7. Roll-over partner
8. Tip-up
9. Headstand
10. Cartwheel

Code:

	1	2	3	4	5	6	7	8	9	10
A										
B										
C										
A										
B										
C										
A										
B										
C										
A										
B										
C										
A										
B										
C										
A										
B										
C										
A										
B										
C										

Neurological Organization: *A* **(Mobility)**

Perceptual Characteristics: *B* **(Agility)**

Basic Motor Skills Fitness Tests: (Tumbling) *C*

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